

## ABSTRACT

An integration component assists in the integration of information distribution systems (IDSs). The integration component may help to identify the scope of the systems that are to be integrated using a multi-level top-down approach. The multi-level top-down approach may include five levels: a system software level , a business process level, a business rule level, an interface function level, and a data level. A fault detection component may then check the identified systems to identify potential faults. This check can be performed by representing the business rules as a Transition-Directed-Graph (TDG) and then processing the TDG using generic depth-first search (DFS)-based algorithms.